

ABSTRACT

An active matrix electroluminescent display (AMELD) having an improved light emitting efficiency and methods of operating the AMELD to produce gray scale operation comprises a plurality of pixels, each pixel including a first transistor having its gate connected to a select line, its source connected to a data line and its drain connected to the gate of a second transistor, the second transistor having its source connected to the data line and its drain connected to a first electrode of an electroluminescent (EL) cell. The EL cell's second electrode is connected to alternating high voltage means. A method for producing gray scale performance including the step of varying the length of time the second transistor is on while the alternating voltage is applied to the EL cell is also disclosed.